

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) Process for obtaining a heating fluid to be used as indirect heat source for carrying out endothermic reactions, comprising the steps of:

-feeding a flow comprising hydrocarbons and a gas flow comprising oxygen to a combustor, wherein such flows are suitably compressed;

- burning said hydrocarbons in presence of said oxygen in the combustor, thus obtaining a high temperature fluid comprising carbon dioxide and oxygen;

wherein the process further comprises the step of feeding a flow comprising water, to said high temperature fluid and/or to said combustor.

2. (Previously Presented) Process according to claim 1, further comprising feeding said water in an amount comprised between 0.1 and 0.7 times the flow comprising oxygen.

3. (Previously Presented) Process according to claim 1, wherein said flow comprising water is fed to said high temperature fluid and/or to said combustor as vapour obtained through evaporation of a water flow at a predetermined pressure.

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4. (Previously Presented) Process according to claim 1, wherein said flow comprising water is fed in said combustor in the form of vapour together with said flow comprising oxygen.

5. (Previously Presented) Process according to claim 4, further comprising the steps of:

- feeding at a predetermined pressure said flow comprising water into the flow comprising oxygen upstream of said combustor;
- heating the so-obtained flow in such a way to let the water at least partially evaporate and obtain a flow comprising oxygen and water vapour.

6. (Previously Presented) Process according to claim 4, further comprising the steps of:

- heating said flow comprising water;
- feeding at a predetermined pressure the suitably heated flow comprising water into the flow comprising oxygen upstream of the combustor, in such a way to let the water at least partially evaporate and obtain a flow comprising oxygen and water vapour.

7. (Previously Presented) Process for carrying out hydrocarbon reforming reactions in an exchanger type reformer, comprising the steps of:

- feeding a gas flow comprising hydrocarbons and water vapour in a reaction space (25) comprising catalyst in said exchanger type reformer;
- feeding a heating fluid in a space (26) adjacent to said reaction space (25) in said exchanger type reformer;
- reacting in a catalytic way the gas flow comprising hydrocarbons by indirect heat exchange with the heating fluid, thus obtaining a gas flow comprising hydrogen;

wherein said heating fluid comprises water.

8. (Currently Amended) Process wherein said heating fluid is obtained through a process according to claim ~~4~~7.

9. (Previously Presented) Process according to claim 8, further comprising the step of cooling down the heating fluid leaving the exchanger type reformer by indirect heat exchange with a flow comprising oxygen and/or water fed to said combustor.

10. (Cancelled)